

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/830,684	04/30/2001	Masato Takahashi	206379US2PCT	9633
22850	7590 11/23/200	•	EXAMINER .	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			KIM, PETER B	
	LEXANDRIA, VA 22314		ART UNIT	PAPER NUMBER
	,		2851	

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	09/830,684	TAKAHASHI, MASATO	
Office Action Summary	Examiner	Art Unit	رر
	Peter B. Kim	2851	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address	•
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be ting by within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communical D (35 U.S.C. § 133).	tion.
Status			
1) Responsive to communication(s) filed on 24 S	eptember 2004.		
2a) ☐ This action is FINAL . 2b) ☑ This	s action is non-final.		
3) Since this application is in condition for allowa			is
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>28,29,31-48 and 51-69</u> is/are pending	g in the application.		
4a) Of the above claim(s) is/are withdra	-		
5) Claim(s) is/are allowed.			
6) Claim(s) <u>28,29,35,42-54,57-65,67 and 68</u> is/ar	=		
7) Claim(s) <u>31-34,36-41,55,56,66 and 69</u> is/are o			
8) Claim(s) are subject to restriction and/o	r election requirement.		
Application Papers			
9) The specification is objected to by the Examine	er.		
10) The drawing(s) filed on is/are: a) □ acc	epted or b) objected to by the I	Examiner.	
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	∋ 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct			
11) The oath or declaration is objected to by the Ex	kaminer. Note the attached Office	Action or form PTO-152.	•
Priority under 35 U.S.C. § 119			
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 		-(d) or (f).	
2. ☐ Certified copies of the priority document		on No	
3. Copies of the certified copies of the prior			
application from the International Bureau		3 *	
* See the attached detailed Office action for a list	of the certified copies not receive	d.	
Attachment(s)	A) [] Inter to 10	(DTO 442)	
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da	ate	
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)	
. oper motorman bate	5) [_] Ouler		

Art Unit: 2851

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Sept. 24, 2004 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 28, 29, 35, 42-54, 57-65, 67 and 68 are rejected under 35 U.S.C. 102(e) as being anticipated by Hazelton et al. (Hazelton) (6,252,234).

Hazelton discloses an exposure apparatus with a stage unit comprising a sample stage (26) that holds a sample (12), a stage driving mechanism (30), a first transmitting member (62) to which at least one part of the stage driving mechanism is connected and a reaction force caused by driving the sample stage is transmitted and a first damping member (64) on the first transmitting member arranged at a position where a maximum strain of the first transmitting member is caused (col. 4, lines 19-30, the ground is the damping means located where the strain on the transmitting member is at a maximum). Hazelton discloses the stage driving mechanism

Art Unit: 2851

comprising a stator arranged on the first transmitting member and a mover that is driven together with the sample stage by electro-magnetic interaction between the stator and the mover (Fig. 2, col. 3, line 54 – col. 4, line 49). Hazelton discloses a stage base (58) that movably supports the sample stage and is supported independently of the first transmitting member. Hazelton discloses a projection optical system (24) between the mask and the substrate, and a holder (42) that is independent of the first transmitting member and holds the projection optical system. Hazelton discloses a controller (22) that synchronously moves the mask and the substrate.

Hazelton discloses an exposure apparatus comprising a driver having a first member (56) couple to the stage (26) and having a second member (50) configured to drive the stage, a stage base (58) that movable supports the stage, a counter stage that moves in a direction opposite to the stage (col. 4, lines 32-49), a first supporting frame (62) that is arranged independently of the stage base and movably supports the counter stage and a damping member (64) that is arranged on the first supporting frame and damps a vibration of the first supporting frame wherein the damping member is arranged at a position where a maximum strain of the first supporting frame is caused (col. 4, lines 19-30, the ground is the damping means located where the strain on the transmitting member is at a maximum). Hazelton discloses a projection optical system (24) and a second supporting frame (42) arranged independently of the first supporting frame and supporting the projection optical system.

Response to Amendment

Applicant argues that Hazelton does not teach the damping member on the first transmitting member. However, Hazelton teaches in Fig. 4, a damping member 64 on the first transmitting member.

Art Unit: 2851

Allowable Subject Matter

Claims 31-34, 36-41, 55, 56, 66, and 69 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter B. Kim whose telephone number is (571) 272-2120. The examiner can normally be reached on 8:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter B. Kim Primary Examiner

Art Unit 2851